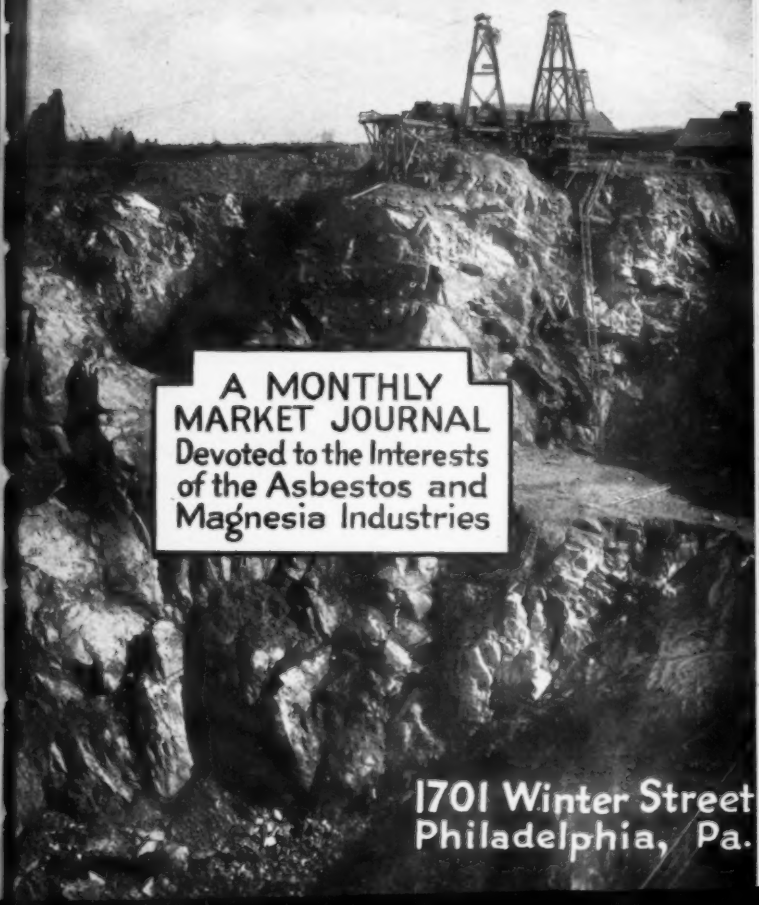
ASBESTOS

MARCH 1932



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ASBESTOS AND MAGNESIA INDUSTRIES

A. S. ROSSITER - - EDITOR

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The Mining and Milling of Asbestos

(A series of five articles by W. A. RuKeyser, B. Sc., E. M., Consulting Engineer of New York City).

No. 1. MINING ASBESTOS

The extraction of asbestos from its enclosing rock is perhaps more of an art than a science. Each deposit must be studied as a separate problem, nor can the flow sheet for an asbestos mill be worked out with any idea of generalization.

The reasons for this are several: in the first place, asbestos being a non-metallic mineral, having its commercial value primarily because of its peculiar fibrous structure (permitting it to be separated and opened up into silky threads having high tensile strength and with a high temperature of fusion) any slight variation in chemical composition results in a widely different set of physical characteristics. Secondly, the value of asbestos fibre depends not only upon silkiness, tensile strength and other physical properties, but upon the length of the fibre.

In discussing the mining of asbestos deposits, attention will be confined mostly to the methods used in exploiting the Chrysotile deposits derived from peridotite and associated basic rocks. The Chrysotile deposits associated with limestone and dolomite are of comparatively minor importance, and usually occur as one or more veins of asbestos included in one or several bands of serpentine, each having a vertical thickness usually not exceeding three feet, and lying nearly flat, or with shallow dips. Furthermore, this type of deposit is usually located in country possessing rugged topography; thus it usually lends itself to access by tunnels and mining by some modification of the "room-and-pillar" method.

Ninety percent of the world's asbestos, both as to value and quantity, comes from deposits of the type found in Quebec, Urals (U. S. S. R.) and Rhodesia, where serpentine is derived from Peridotite. These large serpentine bodies that contain the veins and veinlets of

asbestos, nearly always outcrop at or near the surface, usually in large, irregular or roughly elliptical masses. The veins of asbestos may be irregularly distributed in the serpentine masses radiating in all directions or may be found in so-called "heads" of rock, comprising economic ore in a more or less regular series of fractures having a roughly parallel direction or directions. The mode of occurrence in any deposit determines the method of mining. Therefore, before a method of mining can be adopted, it is first necessary to determine, by suitable prospecting, the outlines of the commercial zone, the

Cableways at the King Mine of Asbestos Corporation, Ltd., Thetford Mines, P. Q., Canada

Photo courtesy B. Marcuse, Canadian Asbestos Co., Montreal

content of asbestos in proportion to the rock which must be mined, the proportion of various grades which can be obtained, the existence or non-existence of bodies of dry rock, the nature and extent of granite, aplite or other rock masses which are, of course, non-economic, but may have to be mined to permit continuity of operation. The method of prospecting must determine also not only the

lateral extent of the deposit, but the vertical depth as well, the nature of the walls and the trend of the deposit in all three dimensions.

Prospecting.

Prospecting is usually conducted by the following methods:

1. Diamond drilling, using steam, air or electrically driven rotary drills, making a more or less continuous core, which is retained for geological study and for mill tests, along with the sludge.

2. Shot drilling, utilizing the "Calyx" type of drill. These latter drills have the advantage in asbestos work because they permit of a larger diameter core being made. The larger cores afford better samples for mill testing and also permit the asbestos veins to be cut without excessive grinding away of values, which values in either case must be collected as a sludge.

3. The sinking of test pits and the cutting of trenches usually affords one of the quickest, cheapest and most efficient means of prospecting asbestos deposits.

Stripping.

Altho the more important asbestos deposits may in many cases outcrop to the surface, they are also often covered with over-burden, which may consist of soil, clay, silt, or perhaps glacial drift, including boulders, etc. Even where such overburden does not exist, the asbestos bearing formations themselves may be so weathered as to require a certain amount of removal of the top material before commercial quality can be expected. Naturally the vegetation must also be removed. Wood is one of the most objectionable substances which can contaminate asbestos fibre.

Hand stripping with animal haulage; scrapers, scraping into tram cars or wagons; steam, electric or gas shovels; hydraulic stripping; light cableways, are the methods employed, depending on the depth and character of the overburden.

Systems of Mining.

The large scale methods of mining asbestos have

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rapidly been more and more standardized, so that at the present time we find practically only four methods generally used:

1. High speed cableways, working benches in open pits which benches may run either horizontally with the long axis of the deposit or laterally across same.

2. Power shovel in open-pits with locomotive or incline-plane (hoisting) haulage.

3. "Milling", into underground workings.

4. Shrinkage stoping with shaft or adit haulage, or some combination of these methods.

The cableways find the greatest application where the mines are hemmed in by property or geological restrictions, thus limiting the working area.

Photo courtesy B. Marcuse, Canadian Asbestos Co.
Loading by Electric Power Shovel

The cableway system of mining is applied by utilizing a great number of extra skips or boxes, now made almost universally of steel. These are loaded on the pit floor, or on the benches, either by hand or by the use of power shovels. The boxes are then handled by power cranes; placed on cars; assembled into trains and run by locomotive haulage underneath the cableways. The rock is roughly sorted into waste and mill rock and handled separately where feasible. This is particularly true in Canada where the asbestos bearing rock occurs

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more in the nature of zones or "heads" of good rock, separated by heads of "dead" or "dry" rock. The rock usually must be mined as it comes, sorting being accomplished in the pits where these different zones permit, a final picking of a smaller proportion of dead rock from the mill feed being possible before and after the crushing operation in the mill.

In the glory-hole method of mining, large funnel shaped holes are opened up at the bottom of the pit in connection with raises driven from main underground haulageways, which in turn are connected to shafts where the ore is hoisted to the surface. It has been found that the men could not work efficiently on the steep slopes of the mill holes and under the extreme winter conditions found in northern latitudes it became most difficult to work in winter at all. The second objection is that the raises clog too often. The grizzlies over the raises clog at all times, with the result that the men working in a mill hole have to await the sledging of large pieces until the grizzly is cleared. Further objection is that water, snow and ice cause considerable difficulty and under spring conditions drain into the underground workings. Lastly, loose rock and slabs have to be continually barred down before becoming inaccessible and bad weather at all times seriously hinders the work.

There is a present tendency toward the use of power shovels with locomotive haulage. This method of loading may be used in conjunction with hoisting by cableways, by inclined planes, or tunnels, by a spiral system of tracks leading out of the pit, or by shafts.

There is also a tendency in most of the important production districts of the world to eliminate the extraction of Crude in the mines, permitting the facile adaptation of power shovel methods. One of the largest and best known of the Canadian producers has for many years been using shovel methods of mining combined with locomotive haulage.

Blasting.

Blasting operations are carried on in the working of asbestos deposits usually by utilizing light hammer drills

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of the jackhammer type, or heavy hammer drills of the Submarine or Turbro types. Occasionally churn-drilling is used and also piston drills are still to be found. In many of the mines employing cableways the heavy hammer-drill is used for preliminary blasting. Drills capable of 2 in. diameter holes to a depth of as great as 75 ft. are in common application, in which case the drills are mounted either on tripods or on carriages.

The holes are usually put down nearly vertically in a series of 20 to 35 feet from the face and are spaced 12 to 15 feet apart. "Lifters" are then put in at a slight angle from the horizontal and the holes are charged heavily, usually with 40% gelatine dynamite in the average serpentine peridotite, but under unusually difficult conditions, such as when hard ore or granite is encountered, 60% dynamite may be used. Ammonia powder is often used after first "springing" with dynamite.

Series firing by battery, is almost universal. Jackhammer type drills are used for block holing, the "mud-capping" of large boulders is employed. Churn-drilling is in general practice only at one property (which is in Canada) and wherein power shovels with locomotive haulage on a large scale have been used for many years. Altho this method may find increasing favor with the future development of other properties, in the past, outside of this one instance subsequent operations were not on a sufficiently large scale to warrant the installation of machinery capable of handling the resulting blasted rock without considerable rebreaking.

Sorting.

Only about 20% of the total rock mined in Quebec is sorted out in the mines as waste; and this tonnage is very largely composed of granite or aplite which occurs frequently thruout the ore bodies in dykes or irregular masses, these being removed of necessity as encountered. Dirt or wood is never allowed to enter the pits, being always thoroly removed during stripping operations.

Loading.

The skips of the cableways are loaded by hand

shoveling, by small or large power shovels, or by cranes. Hand methods are resorted to in inaccessible places; small or large power shovels either after the crude has been picked or where little crude must be sorted out; cranes where large boulders are shot down which are handled by chains, and for loading skips on to flat cars. Cars are then loaded always either by power shovels or cranes. Mechanical loading of every kind of mine output except hand cobbed crudes is now general.

NOTE: The second in this series will appear in the May issue.

Ferroclad Insulation

Insulation, both of asbestos and other kinds, must often be protected by a stronger, more permanent material to resist the chance blows and rough usage it is certain to get when used in certain places.

Formerly protection has been accomplished by placing the insulating material between two sheets of steel or other material and bolting them together. So far as strength was concerned this was satisfactory, but the bolts tended to transmit the heat from one side of the finished product to the other. Also the details of erection were quite onerous.

A material has been invented, and patent applied for, which overcomes the disadvantages of the three piece sheet. This material is called Ferroclad insulation, and is made by the Truscon Steel Company of Youngstown, Ohio. It is simply a sheet of insulating material of the desired thickness, with outer layers of steel tightly and permanently joined to the insulation as a unit.

The resulting product is a sheet which combines the heat, cold and sound insulating value of any commercial insulation board with the strength, fire safety and permanence of steel. The bond between the insulation and the steel is so positive that the insulation will separate internally before any sign of a rupture occurs between the steel and insulation, and this is true whether it encounters high or low temperature.

Ferroclad insulation does not always utilize asbestos material as the core, but selects the insulation best suited for the purpose for which the ferroclad sheet is intended. For instance one of the very large markets for Ferroclad is its use for the outside wall construction of industrial dryers. Where temperature for dryers runs between two hundred and four hundred fifty degrees, the core is an insulating board such as celotex. When the temperature is higher and such a board would be unsatisfactory, asbestos aircell board has been found to be the best material.

The rigidity of the sheets and their handy size (42x120 inches maximum) make them easy to handle and erect. The steel covering is 24 x 20 gauge and there is therefore no difficulty in cutting, drilling or sawing; nails can even be driven thru the panels without difficulty.

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Manufacturing Aircell Automatically

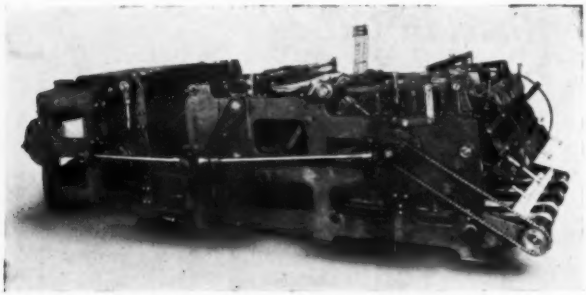
More than two years ago there was announced in these pages, a machine for the manufacture of Asbestos Aircell Pipe Covering.

Before finally placing this machine on the market, however, it was found desirable to add certain other mechanical operations that would add greatly to its efficiency.

The photograph shows the machine as now designed and built — quite different from the one illustrated in August 1929 "ASBESTOS."

This present machine trims the paper to standard length, cuts the required number of plies to width, applies the silicate, feeds the inner-liner and molds into concentric half sections — all automatically.

The operation is continuous — the roll of corrugated paper is placed on a spindle at one end of the machine, the



The Automatic Aircell Machine; feeding and cutting unit to the left; molding unit to the right.

sheet is then carried forward automatically and trimmed to standard length (36 inches); it then passes under a vertical cutter regulated to cut the paper to the several widths of the various plies. These small sheets are then conveyed over a cylinder revolving in a tank of Silicate of Soda, thus

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applying the adhesive; the sheets drop on a stacking plate, which contains the sheet of inner-liner already cut from a roll of this material and placed in position on the stacking plate by automatic fingers.

When the sheets have thus been assembled on the stacking plate, an arm clamps down and transfers them to a position immediately in front of the molding apparatus, equalizers then adjust the sheets to the proper angle, they are pushed into the molding unit which molds them into the half sections.

The molding unit consists of six molds, equally spaced, travelling on an elliptical track; these molds revolve slowly and discharge the molded section, by means of an endless belt, at the base of the machine.

After placing the rolls of paper on the spindles provided the operation is entirely automatic until the finished molded section is picked up. The machine can be adjusted for the making of various sizes.

The feeding and cutting unit of this machine is 4 feet high, 4 feet long and 6 feet wide; the larger unit is 4 feet high, 8 feet long and 6 feet wide. The belts connecting the two units should be two feet long in order to give room for inserting the roll of inner-liner. Total floor space required is less than one hundred square feet, and the total weight of the machine approximately 4500 pounds.

The machine, means decreased labor cost (only one man is needed to run it); productive capacity is greatly increased over the old hand methods, and the resulting products are more uniform.

The designers, Concentric Automatic Aircells, Inc., (whose advertisement appears on the opposite page) will be glad to supply further information.

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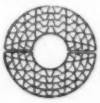
Concentric  **Air - Cells**

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FACT AND FANCY

Crude in Arizona.

This is the kind of Crude Asbestos they produce in Arizona. Just at present the mines are working little if at all, due to the "depression" and the low prices prevailing for Crude.

But the asbestos is still there, and, as our readers know, of excellent quality — Arizonians say the best in the world which, at that, isn't far from the truth.

The gentleman in the background is Roger Q. Kyle, who is interested in Arizona Asbestos Deposits and who was kind enough to send us the photograph.

"Working for the Soviets".

This is the name of a fascinating account of the adventures of Mr. and Mrs. W. A. RuKeyser, New York City, in the Soviet Union.

Mr. RuKeyser, our readers will remember, acted as Consulting Engineer for the Uralasbest or Asbestos Trust in the Soviet Union, in 1929 and again in 1930-31. Mrs. RuKeyser accompanied him. They were thus able to observe at first hand the life and customs of the Russian people, the working of the Five Year Plan, and the conditions surrounding the workers and Mr. RuKeyser has told of these in most interesting style.

To anyone interested in Russia we recommend this very entertaining book. Those interested in Asbestos as well will find in it a great deal of information on the Russian Asbestos Mines, and mills. It is published by Covici Friede, 386 Fourth Avenue, New York City, and retails for $3.00.

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Mr. RuKeyser has written for "ASBESTOS" a series of articles on the Mining and Milling of asbestos, the first of which is published on page 2 of this issue.

Dr. Hall Retires.

Dr. A. L. Hall, during January retired, after 29 years of service, as Assistant Director of the Geological Survey of the Union of South Africa.

Dr. Hall arrived in South Africa in 1903 to take up the post of Second Field Geologist on the Transvaal Geological Survey. He is well known as the author of a large number of memoirs and other contributions to the economic and general geology of South Africa. His Memoir No. 12—Asbestos in the Union of South Africa—is valued by all interested in the Asbestos Mining Industry.

The New A. S. of H. & V. E. Guide.

The American Society of Heating & Ventilating Engineers Guide for 1932 has recently been published.

The Text Section of this new Guide contains 40 chapters of important data on the design and installation of heating, ventilating and air conditioning systems. Approximately 50% of the subject matter is entirely new, and every chapter has been re-written and revised.

The chapters of most interest to the Asbestos Industry are Chapter 2, Estimating Heat Losses; Chapter 3, Heat Transfer Thru Materials and Constructions; and Chapter 12, Pipe Insulation.

Chapter 3 contains some interesting tables giving the conductivities of various building materials and insulations, including Asbestos Wood, Millboard and 85% Magnesia.

The January issue of the Architectural Record publishes an article by E. Lonberg Holm on "Technical Developments in 1931". The article mentions, among other things "Ferro-Clad Insulation (see page 11 this issue) and Cemesto-Board (Page 48 of June 1931 "ASBESTOS"). Aluminum Foil insulation is also featured in this article.

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The Death of J. G. Gartner

It is with much regret that we announce the death, on February 23rd, of J. G. Gartner of R. E. Kramig & Company, Cincinnati, O. Mr. Gartner had been in ill health for some time.

Mr. Gartner has been connected with the Asbestos Industry for thirty-six years. The Partnership Agreement between he and R. E. Kramig, was entered into in July 1900, almost thirty-two years ago.

Mr. Gartner was well and favorably known to all of the trade in the Cincinnati territory, and the Company which is and has from its founding been a distributor for Carey Products, has always enjoyed a successful business.

A New Use For Asbestos Cement Pipes

From Paris comes information concerning the construction of houses out of asbestos cement tubes.

M. Henri Sauvage, the French architect, is said to have evolved a new plan for rapid and cheap construction of houses. The inventor's building tubes are made of a mixture of asbestos and cement. Round the foundations of the house are arranged a number of plugs placed close together. Over each plug is fitted one of the vertical tubes, and an injection of cement joins the two together.

The resultant building is, of course, fireproof, and has the advantage of being cool in summer and warm in winter.

M. Sauvage argues that the tube is one of the strongest and most economical forms any material can take.

We are trying to obtain further information on this rather interesting type of building construction. If any of our readers in France can send us data or photographs we shall be glad to have them.

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The Use of Asbestos in German Theatres

Protection from fire for its theatre going public is regarded as quite important in Germany and leads to the use of fireproof curtains many of which are asbestos, and of other asbestos safeguards.

One of our correspondents in Germany tells us that where an iron curtain is not in existence or cannot be installed, the German Government has ordered that the outside curtain must be made of asbestos cloth, in order to prevent spread of stage fires to the audience. The cloth usually used for the purpose is of good trading quality with 8 per cent cotton, approximately 1000-1200 grams per square metre. The cloth must be dressed and painted over or covered with a thin, colored cotton cloth impregnated against fire, so that the curtain is not recognizable as asbestos cloth.

The police in the different towns of Germany go a little farther and insist that the wings and side scenes shall consist of asbestos cloth. For this purpose a very light cloth of approximately 400-500 grams per square metre, with 8% cotton is used. The cloth is rather loosely woven, then impregnated and finished on both sides so that the surface becomes smooth and even. The cloth receives a certain stiffness by the impregnation, and can be painted over as much as one likes, or it can be covered with other material that is impregnated against flames. The large theatres in Germany are very strictly controlled.

The kinos (moving picture theatres) in Germany must also be protected with asbestos cloth, especially the operating room, which harbors the projection apparatus. The walls of the room are lined with asbestos millboard and draped with asbestos cloth. Besides this the apparatus itself must be covered with a blanket of asbestos cloth, the purpose of which is to smother a blaze which might arise from inflammability of the films. The blanket used for this purpose is 2 x 2 metres (79 x 79 inches) in size, is chemical-

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ROBERTSON

ly pure, and has a weight of approximately 1200 to 1400 grams per square metre.

The kinos are just as strictly controlled as the theatres and it is doubted whether any exist which are not equipped with these safeguards.

An Apparent Impossibility Accomplished

Running a railroad train thru a skyscraper is an unusual procedure to say the least, but even the seemingly impossible has been accomplished by the use of asbestos.

It appears that the Bell Telephone Laboratories in New York City stands on ground over which the New York Central R. R. has the right of way, and when the railroad wished to utilize this right of way, the Bell Laboratories instead of moving elsewhere, gave the Railroad permission to run their tracks right thru the building.

Therefore, instead of tearing the building down, the engineers are simply putting a tunnel thru it in which the tracks can be laid and the trains run.

The tunnel, by the way, is thirty-six feet wide, and extends the entire length of the building, 235 feet, and from the second to the fifth floor.

The chief problem, naturally, is how to eliminate the vibration. The Laboratories have much delicate and complicated mechanism and highly sensitive testing apparatus, and it is necessary that these be undisturbed.

To make a long story short enormous vibration mats made of lead and asbestos are used to separate the tunnel from the building wherever the two come in contact, while the two inches of space between the tube and the building is packed with a sound and heat insulating material.

To the layman it would seem to be rather a dubious experiment, but one or two somewhat similar installations are to be found. The new Waldorf-Astoria Hotel in New York City is insulated against vibration from underground train tracks in much the same manner, and found to be entirely satisfactory.

Asbestos Fibre

for the manufacture of

Roofing Cements · Fibrous Paints
Filtration Packings
Asbestos Shingles and Lumber
Insulating Cements
Asbestos Paper · Pipe Coverings
Asbestos Millboard
High Temperature Cements

THE QUEBEC ASBESTOS CORPORATION

Office and Mines
EAST BROUGHTON, PROVINCE of QUEBEC
CANADA

Little Lessons in Selling

A SALES ANALYSIS FORM

By John T. Bartlett

Careful, painstaking selling as opposed to hasty, slovenly selling, has come to the front as one result of depression. The rough-and-tumble, pell-mell salesmanship of yesterday does not suffice.

This is no time for the high-flying salesman, who sought out only the obvious, easy to reach prospects, and left much of his territory uncultivated.

Indicative of the new spirit in selling, is a sales- analysis form, which is found in extensive use in a number of trades and industries. The form varies with salesmen and trades, but the principle is the same.

Something like an inventory is made of each prospect in the trade territory. The concern's line is checked against the individual prospect. Some of the forms are filled in by the salesmen at the office, out of familiarity with the prospect's circumstances. In other cases the salesman visits one prospect after another, making out his sales analysis forms. Of course, the manner of his canvass may be astute. He has a general conversation, but directs it here and there, so that, concluding, he has all the facts he needs.

Thus is developed a complete prospect inventory. What the prospect may be in the market for soon, and next year; what he already has, won't need; red hot need for immediate action; these stand revealed.

Commonly, the sales analysis plan being broached, salesmen explain, "Oh, I know all about my customers and prospects anyway!" The same answer that merchants with incomplete bookkeeping systems used to make. Put this in your pipe and smoke it—the salesmen of today who are making good on the job are using sales-analysis methods.

CONTRACTS EXECUTED ANYWHERE
High and Low Pressure Insulation
Brine and Ammonia Cork Insulation
STONE INDUSTRIAL EQUIP. CO.
SPRINGFIELD : : MASS.

Asbestos Fibres

of

SUPERIOR QUALITY

from the

DANVILLE DISTRICT

CANADA

Address Inquiries to

Nicolet Asbestos Mines Limited

Inc

25 Broad Street, NewYork

CABLE ADDRESS NICOBEST NEW YORK

Sole European Distributors

Compagnie Commerciale De Minerais
Et Matieres Premieres

74 QUAI DE JEMMAPES PARIS, FRANCE

MARKET CONDITIONS

General Business.

Let us quote from the March letter of the National City Bank:

"The month of February has been another period of slack trade and disappointing performance by the major industries, which have not shown the seasonal upward movement expected with the approach of Spring. In the markets, however, and in the indexes to public sentiment provided by the number of bank failures and the volume of currency in circulation, the showing has been better. Both security and commodity markets responded at once to the hopes of improvement afforded by the introduction of the Glass-Steagall bill. Likewise, the number of banks forced to suspend during the month has been very much smaller than in January and December, and the amount of currency in use has declined somewhat, giving evidence of relaxation of the demand for hoarding purposes, which has been a principal cause of credit strain."

This appears to give a very fair idea of the general business situation.

Asbestos. Raw Material.

Shipments from the Canadian Mines for February were about the same as January, and both months were poor.

Shipments of Crudes have been especially low but this is not hard to explain. The molded type of brake lining is partly accountable. The keen competition in general Textiles, and low volume, is another factor. Again, improvement in the grading by the Canadian Mines, of spinning fibres, has been so marked that few spinners require Crudes for the manufacture of commercial yarns. Of course very fine yarns still require Crudes, but the volume of fine yarn business in the United States is not very great at the present time.

Up to date no new uses for Crudes have been found, and so far as we know none are on the horizon. Consequently, even if Rhodesia and Russia were not selling Crudes in

Allbestos
CORPORATION

MANUFACTURERS OF ASBESTOS TEXTILES

SPECIALIZING IN ASBESTOS
YARNS OF SUPERIOR QUALITY
FOR
PARTICULAR REQUIREMENTS

❖ ❖ ❖

Woven Brake Lining and Allied Products
Custom weaving all sizes of untreated brake lining tape up to 12 inch wide and 1-¼ inch thickness.
Non-Ferrous Cloth
Plain Cloth --- Metallic Cloth
Asbestos Tapes and Wiping Cords, Yarns
Asbestos Wick and Rope
Pure Asbestos Carded Fibres

❖ ❖ ❖

Manufactured in Our Own Plant from the Raw Materials

Allbestos Corporation

21st St. and Godfrey Ave., Germantown
PHILADELPHIA, PA.

the American market, Canada would still be producing more Crudes than the Untied States requires.

Manufactured Asbestos Goods.

Textiles continue to be low in volume and prices lower than for years, in fact in some cases prices quoted on certain items are lower than any textile manufacturer ever remembers.

"What can be done to remedy a situation such as this," is being asked by the various manufacturers, which would indicate an awakening to the situation and an effort to improve things—an effort which has been practically non-existent previously.

People will not buy what they do not need or want, no matter how low the price, but they are generally willing to pay a fair price for quality, when they really need the material.

Brake Lining. One manufacturer expresses it as his opinion that woven moulded lining will now come to the fore, particularly as this type seems adapted to the braking of a car having free wheeling. Whether his propheecy is correct remains to be seen. The brake lining situation as a whole seems not too bad. Replacement, especially with many states insisting on periodical inspections, constitutes quite an item in the lining manufacturer's sales. Automotive circles are also quite optimistic about spring and summer business. A new price list has been adopted by the asbestos brake lining manufacturers.

Insulation. High Pressure. Volume of industrial and large office building continues to shrink hence insulations of the Magnesia, Superex, High-Temp type are not enjoying a very big business. Prices are stable and may confidently be expected to remain so, at least for some time to come.

Insulation. Low Pressure. With the low rate of building activity, particularly residential, not much can be expected from the low pressure line at this time. Prices, however, are stable, and stocks on dealers' shelves being exceedingly low, it is certain that the least pickup in general business will show much improvement in insulation.

Paper and Millboard. Volume remains low. Prices are fairly stable. Any improvement in aircell will un-

TEXTILE PRODUCTS

ROVING, YARN, CORD, THREAD

BRAIDED AND WOVEN TUBING

ASBESTOS CLOTHS FOR EVERY PURPOSE

FIRE RETARDANT CURTAINS

VALVE STEM, HIGH PRESSURE AND SHEET PACKING

DIE-FORMED PACKING RINGS

BRAKE LINING — CLUTCH FACINGS

ROVING, FINE YARN, CORD AND LISTING MADE FROM NON-FERROUS FIBRE

GENERAL ASBESTOS & RUBBER DIVISION
OF
RAYBESTOS - MANHATTAN, INC.
NORTH CHARLESTON, S. C.

doubtedly mean more volume in paper.

Asbestos Cement Products. One manufacturer says that demand for asbestos shingles seems to be keeping pace with last year as far as tonnage is concerned, altho prices, being about 20% lower than this time last year, show a proportionately lower dollar sales value. Prices to the general trade seem to be similarly established at the present low levels and there is no apparent necessity for or likelihood of any price changes.

Large government or industrial purchases have recently reached amazingly low prices showing that manufacturers are still anxious for volume at prices less than the current market and maybe even less than cost.

Another manufacturer tells us that the shingle business is going along fairly well and that improvement is noted in the wall boards or tiles, indicating that some money is being spent by the home owner for material not strictly a necessity.

Note: The above represent the opinions of men close to the various fields. If your ideas differ let us have your side of the story.

CYPRUS ASBESTOS

A true Chrysotile fibre of great tensile strength, exceptionally clean and well graded, suitable for the manufacture of—

Asbestos-cement pipes, sheets and shingles
Asbestos millboard
Moulded brake lining
Etc., etc.

APPLY FOR SAMPLES AND PRICES TO SOLE AGENTS—

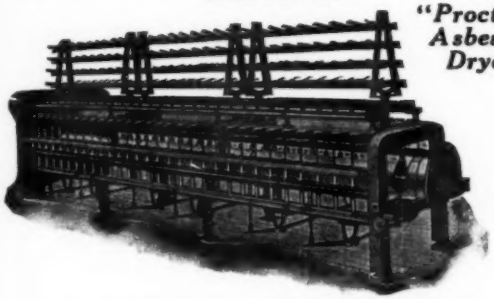
CYPRUS TRADING CORPORATION, Ltd.

49, ST. JAMES'S STREET
LONDON, S. W. 1

ASBESTOS YARN MACHINERY

"Smith-Furbush"

"Proctor" Asbestos Dryers



PROCTOR & SCHWARTZ, INC.

Formerly Smith & Furbush Machine Co.

Seventh St. & Tabor Rd., Philadelphia, Pa.

High-Grade Asbestos Textiles

CARDED FIBRES
YARNS. CORD, MANTLE YARNS
PLAIN AND METALLIC CLOTHS
BRAIDED AND WOVEN TAPES
BRAIDED TUBINGS
WOVEN SHEET PACKINGS
WOVEN BRAKE LININGS
GLOVES, MITTENS, LEGGINS
GASKETS, SEAMLESS AND JOINTED
PACKINGS, STEM AND HIGH PRESSURE
WICK AND ROPE

ASBESTOS FIBRE SPINNING COMPANY

NORTH WALES, — PENNA.

Special Thickness Cork Moulded Fittings
Screwed. Outside Area in Square Feet.

Pipe Size	Ells 90° & 45°	Tees	Globe & Check Valves	Crosses	Angle Valves S or SB	Gate Valves SB or BB	Flange Covers	Pipe Size
½	1.3	1.5	1.8	2.9	1.5	1.2 SB	4.3	½
¾	1.5	1.7	2.1	2.8	1.7	1.7 "	4.3	¾
1	1.5	1.7	2.5	2.9	1.9	1.8 "	4.6	1
1¼	2.0	2.2	3.0	4.0	2.5	2.5 "	5.5	1¼
1½	2.2	2.6	3.7	4.6	2.7	2.7 "	5.5	1½
2	2.4	2.9	4.7	4.8	3.8	6.0 BB	6.3	2
2½	2.8	3.7	5.6	6.3	4.5	7.0 "	6.6	2½
3	3.4	4.5	6.8	7.7	5.6	8.5 "	6.9	3
3½	3.4	4.5	12.3	7.7	9.6	16.0 "	7.5	3½
4	3.9	5.2	12.3	8.5	9.6	16.5 "	7.5	4
4½	3.9	5.9	14.3	9.3	11.5	21.0 "	8.8	4½
5	4.5	6.0	14.5	10.2	11.5	22.0 "	8.8	5
6	11.0	15.3	17.0	26.9	13.6	26.0 "	9.9	6
7	12.3	17.6	18.5	30.8	14.7	29.0 "	10.3	7
8	13.8	19.8	19.5	35.1	15.9	33.0 "	10.8	8
9	14.3	20.2	22.5	35.1	18.0	38.5 "	12.3	9
10	15.8	22.5	24.5	39.6	19.7	42.5 "	12.9	10
12	18.0	25.4	31.0	44.4	24.6	52.5 "	13.8	12
14	22.3	33.0		60.4			14.5	14
16	24.7	36.5		60.4			15.4	16
Flanged.								
½	5.3	8.5	5.2	8.5	4.8	3.5	4.3	½
¾	5.5	5.5	5.4	8.5	4.8	3.6	4.3	¾
1	6.0	6.0	5.9	9.5	5.4	4.3	4.6	1
1¼	7.5	7.0	7.4	11.0	6.2	4.8	5.5	1¼
1½	7.5	7.0	7.7	11.0	6.2	4.9	5.5	1½
2	9.5	10.5	8.8	16.0	7.2	6.2	6.3	2
2½	9.5	10.5	9.2	16.0	7.5	7.1	6.3	2½
3	10.0	11.5	10.6	16.0	8.4	8.3	6.9	3
3½	12.0	12.5	11.9	18.5	9.5	9.4	7.5	3½
4	12.0	12.5	12.6	18.5	10.3	10.6	7.5	4
4½	14.0	14.5	16.8	21.0	13.2	14.9	8.8	4½
5	14.0	14.5	16.8	21.0	13.2	15.5	8.8	5
6	16.0	16.5	19.6	24.0	15.5	18.2	9.9	6
7	18.5	19.5	21.0	28.5	16.7	20.6	10.3	7
8	22.0	23.5	22.7	38.5	17.9	23.6	10.8	8
9	24.0	25.5	25.8	39.5	20.4	27.1	12.3	9
10	27.0	29.0	28.8	46.0	21.9	29.6	12.9	10
12	28.0	29.5	35.0	52.5	29.2	36.8	13.8	12
14	32.0	34.0		42.0		42.0	14.5	14
16	32.0	38.0		48.5		49.6	15.4	16

"S" Screwed Bonnet
BB Bolted "

¼ & ⅜ fittings same area as ½

10-15-27 File #36

Published by courtesy of The Asbestos Contractors Association of New York City

CONTRACTORS AND DISTRIBUTORS PAGE

SPECIAL THICK BRINE CORK FITTING TABLE

The table shown on the opposite page is for use in figuring canvas requirements and paint areas of Special Thickness Brine Cork Fittings and Flanges.

In April 1930 we published a similar table for ice water cork fittings and flanges, and in June 1930 one for Brine Cork Fittings and Flanges. This Special Thick Brine Cork Fitting Table will supplement the other two and make the file complete.

Of course we realize that cork has nothing to do with asbestos but most asbestos insulation contractors handle cork pipe covering and fittings and therefore should find these tables quite useful.

As a matter of fact a good many contractors guess at the areas given in these tables because it is a difficult job to figure them, and this table should therefore be especially helpful as it will enable contractors to accurately figure their estimates on this particular kind of work.

WAGE NOTES

Cleveland, Ohio, on or about January 20th, reduced wage rate for asbestos workers from $1.42½ to $1.17½.

Minneapolis, Minn. Rate for asbestos workers was recently reduced from $1.18 to $1.06¼.

Chicago, Ill. Agreement has been signed by Asbestos Workers in Chicago, establishing a rate for Mechanics of $1.37½ per hour; apprentices 95c per hour. The agreement went into effect March 1, 1932, and covers a period of one year. The previous rate for mechanics was $1.67½.

Spokane, Wash. Steamfitters and plumbers in Spokane have been receiving $10.00 a day, asbestos workers $9.00. The plumbing shops requested the Union to reduce the wage to $8.00 so that they could get more work and the Union after careful consideration decided they would try out a $5.00 a day scale for ninety days and see how it worked. The asbestos workers fell into line and their scale was reduced to $5.00. The general effect appears to be good and it is believed that this $5.00 scale will be continued until business conditions change.

When Philadelphia employers started to reduce wage rates in the building trades they met with much opposition from certain trades where the agreements had been made for three or five years and had not expired. A few of the trades even took the matter to Court. Decision was rendered about the middle of February to the Marble Setters, this decision not granting the injunction sought by the trade.

Africa (Rhodesia).

(Statistics published by Rhodesia Chamber of Mines).

	December 1931 Tons	Value
Bulawayo District.	(2000 lbs.)	
Nil Desperandum (Afr. Asb. Mng. Co. Ltd.)	392.13	£4,901 11 3
Pangani (J. S. Hancock)	9.02	106 5
Victoria District.		
Gath's (Rho. & Gen. Asb. Corp. Ltd.)	171.95	2,149 7 9
King (Rho. & Gen. Asb. Corp. Ltd.)	158.72	1,984 1 ..
Regina A (Afr. Asb. Mng. Co. Ltd.)	45.00	562 10 ..
	776.82	£9,703 10 5
December 1930	*2,322.77*	*£48,771 10 3*

SUMMARY FOR THE YEAR — RHODESIA (Tons - 2000 lbs.)

	1930	1931		1930	1931
January	4,775.14	4,430.27	July	1,572.33	1,056.00
February	4,125.57	4,719.53	August	3,816.33	1,411.82
March	3,078.23	1,995.19	September	3,974.14	1,283.11
April	2,515.78	2,975.87	October	3,377.88	114.08
May	2,761.78	3,409.53	November	3,271.17	552.89
June	2,174.71	1,317.35	December	2,322.77	776.82
				37,765.83	24,042.46

Canada.

(Published by Bureau of Mines, Province of Quebec).

Production — Divided by Grades	January 1932 Tons (2000 lbs.)
Crude No. 1	17
Crude No. 2	37
Other crudes	....
Spinning Fibres	575
Shingle Stocks	3,144
Paper Stocks	2,075
Waste, Stucco or Plaster Materials	468
Refuse and Shorts	3,874
	10,190
By-Products (sand, gravel, etc.)	402

A Pipeless Furnace on the First Floor

By A. M. Baker, Portland, Ore.

A family in a coast city in California, has a very novel arrangement for heating their large house. They had no basement and wished to have some kind of a furnace and get away from the ugly looking stoves.

On the first floor there was a closet off from a bed room and this happened to be located almost in the center of the house .

This closet, about six feet square, was completely lined with thick asbestos and then a large stove of the circulating heat variety, was installed in it.

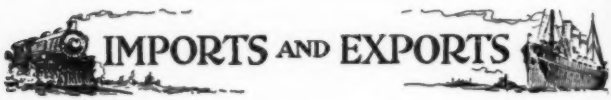
Near the floor, on the side of the closet toward the living room, a cold air register was set; the same being about three feet long, and a foot and a half high. This took the cold air from the rooms and drew it up thru the stove to be heated and sent out again.

Above the cold air register, in the same wall, was another register, or grating, three feet by five feet, the top of which was just below the ceiling. Thru this poured the hot air. It was, to all intents and purposes, a pipeless furnace.

In the ceiling of the closet was another register that could be closed or opened to heat the rooms of the upper floor. It has proven to be a most satisfactory heating plant and very adequately heats the house.

The thick asbestos lining of the closet completely satisfied the insurance companies and the building inspector.

In the Market for Large or Small Quantities of
Metallic Yarn Waste — Asbestos Textile Waste — Scrap Cloth
Yarn Cuttings — Loom Sweepings — Cardroom Strippings
NEWARK WASTE CO.
55 to 59 River Street NEWARK, NEW JERSEY



Imports into U. S. A.

Unmanufactured Asbestos.

	January 1931 Tons (2240 lbs.)	Value	January 1932 Tons (2240 lbs.)	Value
Africa (Br. S.)	133	$ 21,555	12	$ 3,082
Africa (Port. E.)	9	1,995	18	2,494
Canada	11,283	349,450	6,274	179,948
Germany	23	2,548	..	.....
Italy	1	707	3	1,231
Russia	414	23,225	..	.....
United Kingdom	18	2,644	46	3,866
	11,881	$402,124	6,353	$190,621

Division by Grades:

All the above is crude with the exception of Canada which is divided as follows:

Crude	22	8,470	43	7,380
Mill Fibre	4,828	243,717	2,174	114,514
Lower Grades	6,433	97,263	4,057	58,054
	11,283	$349,450	6,274	$179,948

Manufactured Asbestos:

	January 1931 Pounds	Value	January 1932 Pounds	Value
Yarn—				
Canada	.....	.....	190	$ 38
United Kingdom	1,039	$ 563	172	22
Fabrics, Woven—				
Canada	125	145	.....	.....
Germany	.....	.....	175	149
Packing, Fabric—				
Germany	2,450	1,477	397	107
United Kingdom	2,174	1,854	1,297	670
Packing, Not Fabric—				
Austria	270	108	.....	.....
Canada	.....	.....	170	43
Germany	375	118	1,430	460
Hungary	220	145	1,104	369
United Kingdom	1,872	641	2,778	861
Shingles—				
France	186,261	2,084	.....	.....
Articles in part of Asbestos, Plain—				
France	.....	.....	73,380	1,423
Brake and Clutch Lining, Woven Fabric—				
Germany	.....	.....	4,100	625

	January 1931 Pounds	January 1931 Value	January 1932 Pounds	January 1932 Value
Brake and Clutch Lining—Molded, Pressed or Formed—				
Germany	148	93	.....	.....
United Kingdom	.....	....	4,167	1,885
Paper and Millboard—None.				
Boiler Lagging—				
United Kingdom	67,691	6,236	.....	.....
Other Manufactures—				
Canada	2,425	235	.....	.....
Germany	3,158	290	.....	.....
	268,208	$13,989	89,360	$6,652

Exports from U. S. A.

Exports of unmanufactured Asbestos during the month of December[1] 1931 amounted to 120 tons, valued at $7,221. During the same month in 1930, exports of unmanufactured asbestos were 206 tons, valued at $16,382.

Exports of Manufactured Asbestos Goods:

	December[1] 1930 Pounds	December[1] 1930 Value	December[1] 1931 Pounds	December[1] 1931 Value
Paper, Mlbd. & Rlbd.	106,356	$11,375	77,658	$6,303
Pipe Covering and Cement	449,295	25,593	76,731	4,932
Textiles, Yarn & Packing	111,297	74,760	65,889	36,759
Brake Lining[2]	441,439	86,843	.....	.....
Molded and semi-molded	.....	.....	.....	49,007
Not Molded[2]	.....	.....	206,880	37,734
Magnesia & Mfrs. of	746,212	47,241	137,138	10,361
Asbestos Roofing[3]	5,638	42,331	1,995	5,566
Other Manufactures	304,922	24,062	276,963	26,999

[1] Exports one mo. behind imports. [2] Lin. Ft. [3] Squares.

Exports of Raw Asbestos from Canada.

	January 1931 Tons (2000 lbs.)	January 1931 Value	January 1932 Tons (2000 lbs.)	January 1932 Value
United Kingdom	.....	.....	25	$ 1,250
United States	5,589	$265,842	2,817	137,183
Australia	....	.....	25	1,500
Belgium	155	8,912	25	812
France	.....	.....	50	2,000
Germany	134	22,000	20	1,600
Italy	.....	.....	142	11,960
Japan	73	3,510	863	41,010
Mexico	25	1,750	.....	.....
	5,976	$302,014	3,967	$197,315

ASBESTOS

	January 1931 Tons (2000 lbs.)	Value	January 1932 Tons (2000 lbs.)	Value
Sand and Waste—				
United Kingdom	.....	.....	60	1,290
United States	6,774	95,291	5,503	77,309
Belgium	30	450	50	750
Germany	47	940	....	.....
Italy	....	.....	44	1,000
Japan	....	.....	27	463
Mexico	....	.....	30	330
	6,851	$96,681	5,714	$81,142
	12,827	$398,695	9,681	$278,457

Imports and Exports by England.

Imports of Raw Material.

	January 1931 Tons (2240 lbs.)	Value	January 1932 Tons (2240 lbs.)	Value
From Rhodesia	1,069	£29,320	225	£ 3,845
From Canada	122	1,374	33	357
From Other Countries	1,139	28,830	274	5,290
	2,330	£59,524	532	£9,492
Re-Shipments	159	5,572	53	1,335
Exports of Manufactured Asbestos Goods:				
To Netherlands	99	5,250	38	4,033
To France	117	6,240	5	1,819
To United States of America	1	712	5	1,259
To British India	894	15,918	229	7,200
To Australia	18	3,101	27	4,530
To Other Countries	1,228	57,528	1,016	41,034
	2,357	£88,749	1,320	£59,875

SUMMARY FOR THE YEAR — EXPORTED FROM U. S. A.

Exports of Unmanufactured Asbestos during the year 1931 totalled 1,530 tons, valued at $122,391; during 1930 the exports were 688 tons, valued at $95,318. (Ton equals 2240 lbs.)

Exports of Manufactured Asbestos Goods:

	Year 1930 Pounds	Value	Year 1931 Pounds	Value
Paper, Mlbd. & Rlbd.	1,917,471	$ 153,232	1,269,434	$125,833
Pipe Covg. & Cement	6,666,348	426,573	2,100,190	119,810
Textiles, Yarn & Pkg.	1,784,168	949,116	1,271,150	662,030
Brake Lining[2]	6,716,521	1,372,068	.....	.....
Molded & semimolded	.....	.....	.....	419,763
Not molded[2]	.....	.....	3,791,500	720,360
Magnesia & Mfrs. of	6,843,063	454,408	2,905,282	200,543
Asbestos Roofing[3]	65,743	393,036	26,556	109,767
Other Asbestos Mfrs.	4,777,154	445,077	2,392,598	248,060

[2] Lin. Ft. [3] Sqs.

ASBESTOS

SUMMARY FOR THE YEAR — RAW MATERIAL IMPORTED INTO GREAT BRITAIN

(See February number, page 47, for other summaries.)

	Crude and Fibre		Waste (inc. Asbestic)	
	Tons (2240 lbs.)	Value	Tons (2240 lbs.)	Value
Africa (Rhodesia)	7,994	£220,230	.....	.....
Canada	1,998	34,066	653	£ 4,236
Africa (Union of South)	5,653	141,838	.....	.....
Africa (Port E.)	67	1,595	.....	.....
Australia	99	909	.....	.....
Austria	24	150	10	62
Belgium	5	96	1	24
France	12	327	..	....
Finland	65	626	..	....
Germany	199	3,134	5	40
Irish Free State	....	.....	1	10
Italy	32	892	10	40
Malta	669	15,794	....	....
New Zealand	1	10	....	....
Soviet Union (Russia)	2,075	42,483	....	....
Spain	83	1,600	....	....
United States of America	703	19,246	772	5,673
	19,679	£482,996	1,452	£10,085

ASBESTOS STOCK QUOTATIONS

(Figures supplied thru the courtesy of Edward G. Wyckoff & Co., 1528 Walnut St., Philadelphia).

	Par	Div.	February High	Low	Last
Asb. Corp. (Com.)	np	–			12½
Asb. Corp. (Pfd.)	100	7			12½
Carey (Com.)	100	8	No Sales		
Carey (Pfd.)	100	6	No Sales		
Certainteed (Com.)	np	–	3½	2⅝	3⅜
Certainteed (Pfd.)	100	7			
Garlock Packing (Com.)	np	–	8⅛	8	8
Johns-Manville (Com.)	np	–	25½	17½	23½
Johns-Manville (Pfd.)	100	7	107	85	96
Raybestos-Manhattan Inc. (Com.)	np	–	11⅝	10	10⅛
Ruberoid (Com.)	np	4	38	33¼	38
Thermoid (Com.)	np	–	2½	2	2½
Thermoid (Pfd. convt.)	100	7	No Sales		
Thermoid (6s. 1934)	100	6	No Sales		

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For
ASBESTOS PRODUCTS OR ENGINEERING SPECIALTIES
STONE INDUSTRIAL EQUIPMENT COMPANY
SPRINGFIELD, MASS.

NEWS OF THE INDUSTRY

Birthdays. The following gentlemen appear on our birthday list this month: G. C. Hall, Secretary, National Asbestos Mfg. Co., Jersey City, N. J., whose birthday falls on March 17th; Lyndon E. Adams, President, Anchor Packing Co., 401 N. Broad St., Philadelphia, Pa., March 21st; John F. Bolger, Vice President, Allbestos Corporation, Philadelphia, Pa., March 27th; J. O. Gillen, President, Gillen-Cole Co., Portland, Ore., March 31st; Glendon A. Richards, President, Richards Mfg. Co., Grand Rapids, Mich., April 1st; George Kanzler, President, Smith & Kanzler Co., Elizabeth, N. J., April 4th; J. Alfred Fisher, formerly Chairman of Bell's United Asbestos Co., Ltd., London, England, April 12th; P. H. Jamieson, Manager, Jamieson Asbestos Co., Montreal, P. Q., April 13th. To all of these gentlemen we extend congratulations and best wishes.

Sall Mountain Company. New capital has been put into this Company, and the business continued without interruption. The administration of the company's affairs is in the hands of F. W. Anderson, as heretofore, and the Company is therefore in better position than ever to take care of its many friends in the trade.

Edgar S. Ross, formerly President and Technical Advisor for Headley Emulsified Products Company of Philadelphia, has been elected Chairman of the Board of Directors and Technical Director, continuing actively his technical activities with the Company. Mr. Ross was at one time connected with the Mellon Insitute of Industrial Research, of the University of Pittsburg.

Standard Asbestos Mfg. Co. of Cleveland, Ohio, has moved its headquarters to 13237 Superior Avenue (Phone: Gl. 2923). They were formerly located at 5808 Euclid Avenue.

Emsco Asbestos Co., of Downey, Calif. On March 1st the New York sales office and warehouse of the Emsco Asbestos Company moved into new and larger quarters at 549 W. 52nd Street. This new location will be very convenient to the jobbing trade and give quick service to the needs of the out-of-town jobber. C. A. Gilbert, New York Manager, says his new quarters will be a great help in giving quick service to his increasing jobber business.

An open house was held on February 19th in the factory of the Jadson Motor Products Company and Emsco Piston Company, Bell, Calif., under the auspices of the Automotive Sales Company, Lambert Company and Motor Parts Company of Los Angeles. Nearly five hundred local shop superintendents and repair men attended, and by a clever arrangement of the program were shown all the various steps in the manufacture of Jadson Valves, Guides, Emsco Piston, and Piston Pins. The factory was in operation and everyone very enthusiastic and welcomed the

opportunity of seeing the actual manufacture of the automotive products they were using in their daily work.

Norristown Magnesia & Asbestos Co. H. W. Davis, formerly with Eternit, Inc., recently joined the Norristown Magnesia & Asbestos Company as sales representative in the Southern territory.

Vermont Asbestos Corporation. Timothy E. Byrnes, President of the Vermont Asbestos Corporation, is spending the winter in Florida where, he reports, the weather is perfect and the section not overcrowded.

The Vermont Asbestos Mines have experienced a decided pick-up since the first of the year and are now operating five days a week, with orders considerably ahead of production on the shorter grades.

McConkey-Docker & Co., Inc., The Southwestern Machinery & Supply Company recently changed its name to McConkey-Docker & Co., Inc. Their location is the same as previously, that is 130-132 W. Madison St., Phoenix, Ariz., and they act as distributors for asbestos packings and other products. K. P. McConkey is President and Manager of this concern, W. C. Hendrie, Vice President and Ted H. Docker, Secretary-Treasurer.

Canadian Asbestos Company, 316-322 Youville Square, Montreal, P. Q., Canada, would be glad to exchange catalogues with any asbestos firm in the United States. Mail your catalogue to the above address and a catalogue of the Canadian Asbestos Company will be sent you in return.

Russell Manufacturing Company of Middletown, Conn., has recently joined the Automotive Engine Rebuilders Association, the headquarters of which are in New York City.

F. A. Gerrard, Assistant Manager of the Replacements Department of the Russell Mfg. Company, is on a nationwide trip, making a close business survey of the seven territorial divisions of the United States covered by the more than 40,000 Rusco trade outlets. Accompanied by S. J. Black, Manager of the Middlewestern Division for Rusco, Mr. Gerrard has completed his investigation of conditions in St. Louis territory and reports a definite upturn in business there and prospects more encouraging than anticipated for 1932 in the entire mid-west. His next survey will be of the southwest, after which he will visit the Pacific Coast.

Weir Wheel Works, Inc., 409 Blanding St., Utica, N. Y., has been appointed distributor, and Auto Car and Parts Co., Springfield, Mass., Jobber, for the entire Rusco line.

Asbestos & Holdings Trust, Ltd. London shareholders of Asbestos and Holdings Trust, Ltd., were favored with a very lengthy statement by E. Scott Robinson regarding his visit to the company's property in Rhodesia. He went thoroly over all the mines and gave the shareholders the benefit of his views. The market for asbestos is said to be improving. Mr. Robinson has no fear of being able to find buyers for all the asbestos that

can be produced. He recently had an offer for 200 tons at £25 per ton, working costs being roughly about £17 per ton. With more working capital greater progress could be made. It is therefore proposed that another company be formed to rework a property as a separate concern, which has become financially embarrassed but upon which a mill is erected. The negotiations which have been taking place are subject to the confirmation of the High Court of Southern Rhodesia. With the mill and the additional capital, it is believed that the new company will make a profit of £12,000 in a little over 12 months' time. Shareholders in Asbestos and Holdings Trust, Ltd., will be given an opportunity of participating in the enterprise. In the meantime it was tentatively suggested and unanimously supported by the shareholders, that a debenture issue of £15,000 should be raised carrying interest at 8 per cent, and that shareholders participating would receive 200 shares in the new company for every £100 subscribed. The debentures will be secured on the assets of the new company.—S. A. Mining & Engineering Journal.

Raybestos-Manhattan, Inc. During the year 1931 Raybestos-Manhattan, Inc., earned $553,992.97, or 85c per share, after charges of $565,505.46 for depreciation, but before charges of $453,763.14 for adjustments of inventories, Canadian Exchange, etc. In 1930 the Company earned $1,156,770.12 or $1.71 per share, after inventory adjustments and provisions for depreciation and income taxes.

The Directors declared a dividend of 25c per share, payable March 15th, 1932, to stockholders of record at the close of business February 29th, 1932.

Thermoid Company. Net income, after depreciation and before interest charges, of the Thermoid Company for the twelve months ended December 31, 1931, amounted to $334,347, or 1.9 times interest requirements for the period, according to the annual report of the Company recently made public by R. J. Stokes, President. After interest and depreciation, net income amounted to $163,413. Current assets as of December 31, 1931, were $2,115,847, of which cash in banks amounted to $603,717, compared with total current liabilities of $333,369, or a ratio of more than six to one. The Southern Asbestos Company, a 95 per cent owned subsidiary, is carried at cost and is not reflected in these calculations.

Southern Asbestos Company for the year shows a deficit from operations of $5,051, attributed principally to the severe competition in the asbestos texile industry. In addition, an inventory adjustment was taken by Southern Asbestos Company in the amount of $59,557 at the year end on materials purchased and on hand before the present management came into control. Net sales in dollars for the year 1931 declined 18 per cent from 1930, altho tonnage sales for the year showed an increase of over 4 per cent.

In a letter to stockholders of the Thermoid Company, Mr. Stokes says in part: "In spite of the widespread industrial de-

pression, which reduced our volume of sales, the Thermoid Company was able to obtain its fair share of available business. The manufacturers of automotive vehicles are large consumers of Thermoid products. While production of new automotive vehicles declined more than 30 per cent during the year 1931 from the previous year, the net sales of the Thermoid Company showed a decline of 22 per cent. The demoralized conditions in Europe affected our export business adversely with the result that export sales decreased considerably. Sales to jobbers, however, declined only 11 per cent, indicating the substantial amount of replacement work which has been going on during the year. Our sales of mechanical goods showed a decrease of only 3 per cent.

"The management has made steady progress in cultivating the automotive repair market and we believe that 1932 will reveal an even greater activity in this particular field. The Company has just added a fan belt line to be offered to the trade, thereby opening up a new source of revenue."

"The Use of Combustible Fibre in Asbestos Textile Goods" —A Practice as Harmless as it is Unavoidable, is the title of an article appearing in the February 20th issue of the India Rubber Journal. The article treats principally on the subject of why cotton is used with asbestos when spinning the latter material.

"Stop & Go" is the rather clever title of a house organ published monthly by the Emsco Asbestos Company for the Automotive Jobbing Trade.

This is a breezy little paper, with plenty of illustrations, and describes the several Emsco products made especially for automobiles.

"Asbestos in 1930," by Oliver Bowles and B. H. Stoddard, has recently been published by the U. S. Department of Commerce. This comments generally on asbestos, gives production in the United States for the past ten years, import and export statistics, and world production figures.

In commenting on the production of the United States for 1930, attention is called to the remarkable increase in sales by domestic producers, particularly that of the Vermont Asbestos Corporation which more than doubled the quantity and nearly doubled the value of its sales in 1930 over 1929.

The producing companies in Arizona also increased their output altho the total for the state decreased as some of the producers closed down entirely for the year.

C. W. Poe Company of Cleveland, Ohio, during November moved from 7600 Carnegie Avenue to 3795 E. 83rd Street, in order to secure additional space for the manufacture of their Poeco Insulating Cement as well as Mineral Wool Blankets and Pipe Covering.

The new location gives them 22,000 square feet of floor space and their own private railroad siding.

Keasbey & Mattison Company announces the appointment of J. Frederick Merz as Staff Engineer in charge of the Sales Engineering Department. Mr. Merz was formerly a Special Representative of Keasbey & Mattison Company in the New York territory on industrial sales and has been brought to the company's headquarters for technical engineering research.

Monroe Paper Products Company of Monroe, Mich., has started the manufacture of Asbestos Paper and Millboard.

Johns-Manville Corporation, and subsidiary companies report for the year ended December 31, 1931, net profit of $583,792, after depreciation, federal taxes, etc., equivalent after dividend requirements on 7% preferred stock, to 8c a share on 750,000 no-par shares of common stock. This compares with $3,268,123 or $3.66 a common share in 1930.

The regular quarterly dividend of $1.75 was declared on the preferred stock, payable April 1, to stock of record March 11, but the quarterly dividend of 25c on the common stock, due to be declared at this time has been omitted.

Connor Roofing & Asbestos Company, Inc., Niagara Falls, N. Y., has been chartered to engage in the roofing materials business. The capital is $10,000 in $100 shares. The incorporators are S. A. Connor, Mable A. Connor and William H. Kelly, all of Niagara Falls.

Emsco Asbestos Company and Emsco Piston Company have had prepared two all talking, motion pictures of the automotive industry. The names of these films are "Stop and Go" and "More Power to You."

The pictures show each progressive step in the conversion of raw asbestos into brake lining. E. M. Smith President, and D. W. Fether, Vice President of the Company make short appearances and some pertinent remarks regarding the product of their twenty five years' experience in brake lining manufacture.

Philip Carey Mfg. Company. The Board of Directors have declared a dividend of 1½% on the Preferred Stock of the Company, payable March 31, 1932 to shareholders of record March 21, 1932. Also a dividend of 1¼% on the Common Stock of the Company, payable March 15, 1932 to shareholders of record of March 10, 1932.

TRADE MARKS

(This information is supplied by the National Trade Mark Co., Munsey Bldg., Washington. D. C., who will conduct free of charge an advance search on any trade mark our readers may contemplate adopting.)

Artrufe. Serial No. 318,808. Metropolitan Roofing Supplies Co., Inc., New York City. For bituminous and asbestos composition roof coverings and roof finishing materials. Passed on January 12th.

Atlas. Serial No. 322,038. Atlas Supply Co., Wilmington,

Del., and Newark, N. J. For brake linings. Passed on February 9th.

Ganold. Class 50. No. 526,387. Brake and Clutch Linings and Brake Blocks. The Gandy Belt Mfg. Co., Ltd., Wheatland Works, Wheatland Lane Seacombe, Cheshire. Registered in the United Kingdom, November 11, 1931.

PATENTS

Gasket. No. 1,838,496. Granted on December 29, 1931 to Frank J. Oven, Chicago, Ill., assignor to Victor Mfg. & Gasket Company. Filed March 5, 1929. Serial No. 344,527. Description upon request.

Pipe Covering. No. 1,838,242. Granted on December 29, 1931 to James M. Wilson, Louisville, Ky., assignor to Reynolds Metals Company, Louisville, Ky. Filed July 12, 1928. Serial No. 292,153.

Described as a pipe covering comprising a spacer material about said pipe and an enclosing sheet of elastic metal.

Adjustable Gasket. No. 1,839,336. Granted on January 5th to Frank J. Oven, Chicago, Ill. Assignor to Victor Mfg. & Gasket Company. Filed December 31, 1926. Serial No. 158,298. Description upon request.

Slab Forming and Bundling Apparatus. No. 1,841,017. Granted on January 12th to Theodore H. Eickhoff, Cleveland Heights, Ohio, assignor to Philip Carey Mfg. Company, Lockland, Ohio. Filed Jan. 12, 1929. Serial No. 332,146. Description upon request.

AUTOMOBILE PRODUCTION

Sales of automobiles in the United States and Canada for the month of December 1931 totalled 123,965, compared with 161,323 in December 1930 and 125,502 in December 1929.

These figures make the totals for the years as follows: 1931—2,472,351; 1930—3,510,178; 1929—5,621,715.

January figures are 123,075 in January 1932, compared with 178,344 in January 1931.

BUILDING

The January construction total in the thirty-seven states east of the Rockies is given as $84,798,400, a figure which is described by F. W. Dodge Corporation, as "surprising in view of the retarding influences at work in this as in all businesses."

Of this total $27,504,300 was in residential building; $33,237,700 in non-residential building and $24,056,400 in public works and utilities. The marked decline in the last named class is "closely tied up with the current wave of budget-cutting on the part of municipalities and other public bodies.

A gain of almost 5 per cent in construction awards during February as compared with the low figures of January reflects a normal rise approximating seasonal proportions, according to F. W. Dodge Corporation.

The $89,045,800 total in new construction awards for February was divided among the four major construction classes with $24,417,300 going to residential building, $36,347,700 to non-residential building, $15,633,400 to public works and $12,647,400 to public utilities.

THIS AND THAT

R. Fuess, Inc., of Berlin-Steglitz, Germany, manufacturers of instruments for scientific research and industrial control, have established an American Office at 245 West 55th St., New York City.

The company has seven different departments: A—Measuring instruments for air pressure, temperature and humidity, and testing apparatus and open air housings. B—Measuring instruments for wind, rainfall, evaporation, radiation and sight. C.—Thermo-control instruments for the measurement of flow, pressure and vacuum. D—Microscopes and instruments for general optical observation and material research. E—Spectroscopic apparatus, goniometers, refractometers and special instruments for crystal-optical determination. F—Apparatus for the measurement of water levels and quantities. G—Special apparatus made to specified requirements.

"The Effect of Reduced Population Growth on Construction Demand" by Thomas S. Holden, V. P. in charge of Statistics and Research, F. W. Dodge Corporation, appears in the January issue of The Architectural Record.

A summing up of the subject stresses the three following points:

1. If current population trends continue, the automatic increase of building demand, which has in the past enabled us to rely on individualistic speculative building projects to fill our needs and which has automatically lifted us out of depressions, tends to disappear.

2. Increased building activity will continue to accompany important new industrial, economic and social developments.

3. As opportunities for speculative real estate and building development gradually dwindle away, the building industry will of necessity develop a sound economic plan, whose opportunities for substantial progress are real but impossible to estimate today.

What you don't know won't hurt you but people get tired listening to it.

Another and rather novel argument for the use of asbestos insulation was brought out in a recent lawsuit filed by a house owner against a plumber.

The house owner claimed that the plumber insulated the pipes with horsehair which provided snug quarters for swarms of moths which devoured both clothing and furniture. Asbestos insulation was demanded as being of no particular interest to moths.

During 1931 2800 airplanes were manufactured in the United States, 1,807 of which were for domestic civil use.

As a general service to the industry we suggest that those insulation, roofing, packing and brake lining salesmen who are at present not employed, list their names with "ASBESTOS".

Then, if manufacturers, jobbers, or others in need of men, will apply here, it may be possible to help both sides.

Salesmen should give full qualifications, which will be carefully placed on file and referred to when requests from manufacturers are received.

The asbestos theatre curtain in the Palace Theatre at Broadway & 47th Street, New York City, doubtless saved hundreds of lives on February 17th when flames swept the stage.

Defective wiring was the cause of the fire.

After spending a brief vacation in Thetford Mines, Quebec, C. V. Smith has returned to Asbest, U. S. S. R., to resume his duties as consulting engineer for Uralasbest Trust. Mr. Smith was chief engineer for Asbestos Corporation Limited of Thetford Mines for many years. He is now employed in the erection of new mills and the development of the Russian asbestos property.

YOU can now obtain from *The Ruberoid Co.* a complete line of Asbestos and Asphalt Building Products as listed below.

ASBESTOS SHINGLES
- Tapered American Method
- Hexagonal
- Horizontal

ASBESTOS ROOFINGS
- Smooth Surfaced

ASBESTOS PAPERS
- Commercial Paper
- Heavy Asbestos Paper (Roll Board)

ASBESTOS PIPE COVERINGS AND BOILER INSULATION
- Sectional Pipe Coverings
  - Aristo Brand
  - Imperial Brand
  - Celasbestos Brand
  - Watcocel Brand
  - Anti-sweat Brand
- Lagging Blocks
  - Aristo Laminated
  - Imperial Brand
  - Celasbestos Brand
  - Watcocel Brand

ASBESTOS MILL BOARD

ASBESTOS CORRUGATED SHEETS

ASBESTOS FLAT SHEETS

ASPHALT SHINGLES
- Units
- Strips

BUILT-UP ROOFING MATERIALS
- Asbestos Felts
- Asphalt Felts
- Tarred Felts
- Roofing Asphalt
- Bond Roofing Asphalt
- Coal Tar Pitch
- Concrete Primer

ASPHALT ROLL ROOFINGS
- Smooth-surfaced
- Mineral-surfaced

INSULATING AND SHEATHING PAPERS
- Kraft Building Papers
- Asphalt Coated
- Tarred Slaters Felts
- Red Sheathing
- Deadening Felts

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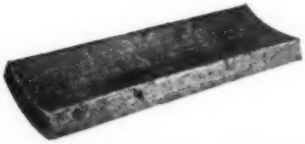

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LUMBER - PAPER
MILL BOARD - CLUTCH FACING
MOULDED BRAKE LINING
ROOF COATINGS - FIBROUS PAINT
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• • •

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